

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/525,113
Source: PCT/10
Date Processed by STIC: 3/2/05

ENTERED



PCT

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/525,113

DATE: 03/02/2005

TIME: 12:55:10

Input Set : A:\MER-138SEQ.TXT
 Output Set: N:\CRF4\03022005\J525113.raw

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4 <110> APPLICANT: MERCK PATENT GMBH
5      CARR, Francis J.
6      BAKER, Matthew
7      CARTER, Graham
9 <120> TITLE OF INVENTION: T-CELL EPITOPE IN STAPHYLOCOCCAL
10     ENTEROTOXIN B
12 <130> FILE REFERENCE: MER-138
C--> 14 <140> CURRENT APPLICATION NUMBER: US/10/525,113
C--> 14 <141> CURRENT FILING DATE: 2005-02-18
14 <150> PRIOR APPLICATION NUMBER: PCT/EP2003/009116
15 <151> PRIOR FILING DATE: 2003-08-18
17 <150> PRIOR APPLICATION NUMBER: EP 02018229.1
18 <151> PRIOR FILING DATE: 2002-08-21
20 <160> NUMBER OF SEQ ID NOS: 84
22 <170> SOFTWARE: FastSEQ for Windows Version 4.0
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 239
26 <212> TYPE: PRT
27 <213> ORGANISM: Staphylococcus aureus
29 <400> SEQUENCE: 1
30 Glu Ser Gln Pro Asp Pro Lys Pro Asp Glu Leu His Lys Ser Ser Lys
31   1           5           10          15
32 Phe Thr Gly Leu Met Glu Asn Met Lys Val Leu Tyr Asp Asp Asn His
33   20          25          30
34 Val Ser Ala Ile Asn Val Lys Ser Ile Asp Gln Phe Leu Tyr Phe Asp
35   35          40          45
36 Leu Ile Tyr Ser Ile Lys Asp Thr Lys Leu Gly Asn Tyr Asp Asn Val
37   50          55          60
38 Arg Val Glu Phe Lys Asn Lys Asp Leu Ala Asp Lys Tyr Lys Asp Lys
39   65          70          75          80
40 Tyr Val Asp Val Phe Gly Ala Asn Tyr Tyr Tyr Gln Cys Tyr Phe Ser
41   85          90          95
42 Lys Lys Thr Asn Asp Ile Asn Ser His Gln Thr Asp Lys Arg Lys Thr
43   100         105         110
44 Cys Met Tyr Gly Gly Val Thr Glu His Asn Gly Asn Gln Leu Asp Lys
45   115         120         125
46 Tyr Arg Ser Ile Thr Val Arg Val Phe Glu Asp Gly Lys Asn Leu Leu
47   130         135         140
48 Ser Phe Asp Val Gln Thr Asn Lys Lys Val Thr Ala Gln Glu Leu
49   145         150         155         160
50 Asp Tyr Leu Thr Arg His Tyr Leu Val Lys Asn Lys Lys Leu Tyr Glu
51   165         170         175
52 Phe Asn Asn Ser Pro Tyr Glu Thr Gly Tyr Ile Lys Phe Ile Glu Asn

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53 180 185 190
 54 Glu Asn Ser Phe Trp Tyr Asp Met Met Pro Ala Pro Gly Asp Lys Phe
 55 195 200 205
 56 Asp Gln Ser Lys Tyr Leu Met Met Tyr Asn Asp Asn Lys Met Val Asp
 57 210 215 220
 58 Ser Lys Asp Val Lys Ile Glu Val Tyr Leu Thr Thr Lys Lys Lys
 59 225 230 235
 62 <210> SEQ ID NO: 2
 63 <211> LENGTH: 21
 64 <212> TYPE: PRT
 65 <213> ORGANISM: Staphylococcus aureus
 67 <400> SEQUENCE: 2
 68 Lys Phe Thr Gly Leu Met Glu Asn Met Lys Val Leu Tyr Asp Asp Asn
 69 1 5 10 15
 70 His Val Ser Ala Ile
 71 20
 74 <210> SEQ ID NO: 3
 75 <211> LENGTH: 24
 76 <212> TYPE: PRT
 77 <213> ORGANISM: Staphylococcus aureus
 79 <400> SEQUENCE: 3
 80 Gln Phe Leu Tyr Phe Asp Leu Ile Tyr Ser Ile Lys Asp Thr Lys Leu
 81 1 5 10 15
 82 Gly Asn Tyr Asp Asn Val Arg Val
 83 20
 86 <210> SEQ ID NO: 4
 87 <211> LENGTH: 33
 88 <212> TYPE: PRT
 89 <213> ORGANISM: Staphylococcus aureus
 91 <400> SEQUENCE: 4
 92 Asn Lys Asp Leu Ala Asp Lys Tyr Lys Asp Lys Tyr Val Asp Val Phe
 93 1 5 10 15
 94 Gly Ala Asn Tyr Tyr Tyr Gln Cys Tyr Phe Ser Lys Lys Thr Asn Asp
 95 20 25 30
 96 Ile
 100 <210> SEQ ID NO: 5
 101 <211> LENGTH: 239
 102 <212> TYPE: PRT
 103 <213> ORGANISM: Artificial Sequence
 105 <220> FEATURE:
 106 <223> OTHER INFORMATION: Modified enterotoxin protein
 W--> 108 <221> NAME/KEY: VARIANT
 109 <222> LOCATION: -21,-24,-28-
 110 <223> OTHER INFORMATION: Xaa=Ala, Gly, Pro, or Met
 111 Xaa=Ala, Gly, Pro, or Met
 112 Xaa=Thr, Ala, Asp, Glu, Gly, His, Lys, Asn, Pro,
 113 Gln, Arg, Ser, or Tyr
 W--> 115 <221> VARIANT
 116 <222> LOCATION: 53, 58

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117 <223> OTHER INFORMATION: Xaa=Ala or Ile
118 Xaa=His or Leu
W--> 120 <221> VARIANT
121 <222> LOCATION: 81
122 <223> OTHER INFORMATION: Xaa=Thr, Ala, Asp, Glu, Gly, His, Lys, Asn, Pro,
123 Gln, Arg, Ser, or Tyr
W--> 125 <221> VARIANT
126 <222> LOCATION: 82, 84, 85
127 <223> OTHER INFORMATION: Xaa=His or Val
128 Xaa=Ala, Pro, Gly, or Val
129 Xaa=Thr, His, or Phe
W--> 131 <400> 5
132 Glu Ser Gln Pro Asp Pro Lys Pro Asp Glu Leu His Lys Ser Ser Lys
133 1 5 10 15
W--> 134 Phe Thr Gly Leu Xaa Glu Asn Xaa Lys Val Leu Xaa Asp Asp Asn His
135 20 25 30
136 Val Ser Ala Ile Asn Val Lys Ser Ile Asp Gln Phe Leu Tyr Phe Asp
137 35 40 45
138 Leu Ile Tyr Ser Xaa Lys Asp Thr Lys Xaa Gly Asn Tyr Asp Asn Val
139 50 55 60
140 Arg Val Glu Phe Lys Asn Lys Asp Leu Ala Asp Lys Tyr Lys Asp Lys
141 65 70 75 80
142 Xaa Xaa Asp Xaa Xaa Gly Ala Asn Tyr Tyr Gln Cys Tyr Phe Ser
143 85 90 95
144 Lys Lys Thr Asn Asp Ile Asn Ser His Gln Thr Asp Lys Arg Lys Thr
145 100 105 110
146 Cys Met Tyr Gly Val Thr Glu His Asn Gly Asn Gln Leu Asp Lys
147 115 120 125
148 Tyr Arg Ser Ile Thr Val Arg Val Phe Glu Asp Gly Lys Asn Leu Leu
149 130 135 140
150 Ser Phe Asp Val Gln Thr Asn Lys Lys Val Thr Ala Gln Glu Leu
151 145 150 155 160
152 Asp Tyr Leu Thr Arg His Tyr Leu Val Lys Asn Lys Lys Leu Tyr Glu
153 165 170 175
154 Phe Asn Asn Ser Pro Tyr Glu Thr Gly Tyr Ile Lys Phe Ile Glu Asn
155 180 185 190
156 Glu Asn Ser Phe Trp Tyr Asp Met Met Pro Ala Pro Gly Asp Lys Phe
157 195 200 205
158 Asp Gln Ser Lys Tyr Leu Met Met Tyr Asn Asp Asn Lys Met Val Asp
159 210 215 220
160 Ser Lys Asp Val Lys Ile Glu Val Tyr Leu Thr Thr Lys Lys Lys
161 225 230 235
164 <210> SEQ ID NO: 6
165 <211> LENGTH: 12
166 <212> TYPE: PRT
167 <213> ORGANISM: Staphylococcus aureus
169 <400> SEQUENCE: 6
170 Pro Lys Tyr Val Lys Gln Asn Thr Leu Lys Leu Ala
171 1 5 10

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DATE: 03/02/2005

TIME: 12:55:10

Input Set : A:\MER-138SEQ.TXT
Output Set: N:\CRF4\03022005\J525113.raw

174 <210> SEQ ID NO: 7
175 <211> LENGTH: 15
176 <212> TYPE: PRT
177 <213> ORGANISM: Staphylococcus aureus
179 <400> SEQUENCE: 7
180 Lys Val Val Asp Gln Ile Lys Lys Ile Ser Lys Pro Val Gln His
181 1 5 10 15
184 <210> SEQ ID NO: 8
185 <211> LENGTH: 15
186 <212> TYPE: PRT
187 <213> ORGANISM: Staphylococcus aureus
189 <400> SEQUENCE: 8
190 Glu Ser Gln Pro Asp Pro Lys Pro Asp Glu Leu His Lys Ser Ser
191 1 5 10 15
194 <210> SEQ ID NO: 9
195 <211> LENGTH: 15
196 <212> TYPE: PRT
197 <213> ORGANISM: Staphylococcus aureus
199 <400> SEQUENCE: 9
200 Pro Asp Pro Lys Pro Asp Glu Leu His Lys Ser Ser Lys Phe Thr
201 1 5 10 15
204 <210> SEQ ID NO: 10
205 <211> LENGTH: 15
206 <212> TYPE: PRT
207 <213> ORGANISM: Staphylococcus aureus
209 <400> SEQUENCE: 10
210 Lys Pro Asp Glu Leu His Lys Ser Ser Lys Phe Thr Gly Leu Met
211 1 5 10 15
214 <210> SEQ ID NO: 11
215 <211> LENGTH: 15
216 <212> TYPE: PRT
217 <213> ORGANISM: Staphylococcus aureus
219 <400> SEQUENCE: 11
220 Glu Leu His Lys Ser Ser Lys Phe Thr Gly Leu Met Glu Asn Met
221 1 5 10 15
224 <210> SEQ ID NO: 12
225 <211> LENGTH: 15
226 <212> TYPE: PRT
227 <213> ORGANISM: Staphylococcus aureus
229 <400> SEQUENCE: 12
230 Lys Ser Ser Lys Phe Thr Gly Leu Met Glu Asn Met Lys Val Leu
231 1 5 10 15
234 <210> SEQ ID NO: 13
235 <211> LENGTH: 15
236 <212> TYPE: PRT
237 <213> ORGANISM: Staphylococcus aureus
239 <400> SEQUENCE: 13
240 Lys Phe Thr Gly Leu Met Glu Asn Met Lys Val Leu Tyr Asp Asp
241 1 5 10 15

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PATENT APPLICATION: US/10/525,113

DATE: 03/02/2005

TIME: 12:55:10

Input Set : A:\MER-138SEQ.TXT
Output Set: N:\CRF4\03022005\J525113.raw

244 <210> SEQ ID NO: 14
245 <211> LENGTH: 15
246 <212> TYPE: PRT
247 <213> ORGANISM: Staphylococcus aureus
249 <400> SEQUENCE: 14
250 Gly Leu Met Glu Asn Met Lys Val Leu Tyr Asp Asp Asn His Val
251 1 5 10 15
254 <210> SEQ ID NO: 15
255 <211> LENGTH: 15
256 <212> TYPE: PRT
257 <213> ORGANISM: Staphylococcus aureus
259 <400> SEQUENCE: 15
260 Glu Asn Met Lys Val Leu Tyr Asp Asp Asn His Val Ser Ala Ile
261 1 5 10 15
264 <210> SEQ ID NO: 16
265 <211> LENGTH: 15
266 <212> TYPE: PRT
267 <213> ORGANISM: Staphylococcus aureus
269 <400> SEQUENCE: 16
270 Lys Val Leu Tyr Asp Asp Asn His Val Ser Ala Ile Asn Val Lys
271 1 5 10 15
274 <210> SEQ ID NO: 17
275 <211> LENGTH: 15
276 <212> TYPE: PRT
277 <213> ORGANISM: Staphylococcus aureus
279 <400> SEQUENCE: 17
280 Tyr Asp Asp Asn His Val Ser Ala Ile Asn Val Lys Ser Ile Asp
281 1 5 10 15
284 <210> SEQ ID NO: 18
285 <211> LENGTH: 15
286 <212> TYPE: PRT
287 <213> ORGANISM: Staphylococcus aureus
289 <400> SEQUENCE: 18
290 Asn His Val Ser Ala Ile Asn Val Lys Ser Ile Asp Gln Phe Leu
291 1 5 10 15
294 <210> SEQ ID NO: 19
295 <211> LENGTH: 15
296 <212> TYPE: PRT
297 <213> ORGANISM: Staphylococcus aureus
299 <400> SEQUENCE: 19
300 Ser Ala Ile Asn Val Lys Ser Ile Asp Gln Phe Leu Tyr Phe Asp
301 1 5 10 15
304 <210> SEQ ID NO: 20
305 <211> LENGTH: 15
306 <212> TYPE: PRT
307 <213> ORGANISM: Staphylococcus aureus
309 <400> SEQUENCE: 20
310 Asn Val Lys Ser Ile Asp Gln Phe Leu Tyr Phe Asp Leu Ile Tyr
311 1 5 10 15

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 03/02/2005
PATENT APPLICATION: US/10/525,113 TIME: 12:55:11

Input Set : A:\MER-138SEQ.TXT
Output Set: N:\CRF4\03022005\J525113.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:5; Xaa Pos. 21, 24, 28, 53, 58, 81, 82, 84, 85—

VERIFICATION SUMMARY

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DATE: 03/02/2005

TIME: 12:55:11

Input Set : A:\MER-138SEQ.TXT

Output Set: N:\CRF4\03022005\J525113.raw

L:14 M:270 C: Current Application Number differs, Replaced Current Application No
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:108 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:115 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:5
L:120 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:5
L:125 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:5
L:131 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:5
L:134 M:341 W: (46) · "n" or "Xaa" used, for SEQ ID#:5 after pos.:16
M:341 Repeated in SeqNo=5